

[Chapter 15.04 SUBDIVISIONS](#)

**Section 15.04.740 Concrete mix.**

A. For the purpose of practical identification, concrete has been divided into three classes: Class A, B and C. Basic requirements and use for each class are as defined below:

<b>Class (sacks/c.y.)</b>	<b>Minimum Cement (psi)</b>	<b>Minimum 28-day Comp. Strength</b>	<b>Primary Use</b>
A	6 1/2	4000	Reinforced structural concrete
B	6	3500	Sidewalks, curbs & gutters, cross gutters, pavements and unreinforced footings and foundations
C	5	2500	Thrust blocks, anchors, mass concrete

B. All concrete shall also comply with the following requirements.

1. Aggregates. The maximum size of the aggregate shall be not larger than one-fifth of the narrowest dimension between forms within which the concrete is to be cast, nor larger than three-fourths of the minimum clear spacing between reinforcing bars or between reinforcing bars and forms. For unreinforced concrete slabs, the maximum size of aggregates shall not be larger than one-fourth the slab thickness.

2. Water. Sufficient water shall be added to the mix to produce concrete with the minimum practicable slump. The slump of mechanically vibrated concrete shall not exceed four inches. No concrete shall be placed with a slump in excess of five inches. The maximum permissible water-cement ratio (including free moisture on aggregates) shall be five and five and three-quarter gallons per bag of cement respectively for Class A and B air entrained concrete.

3. Air-Entraining. Air content for air-entrained concrete shall comply with the following:

<b>Course Aggregate Size (in.)</b>	<b>Air Content (%)</b>
1 1/2 to 2 1/2	5 ± 1
3/4 to 1	6 ± 1
3/8 or 1/2	7 ± 1

The air-entraining agent shall be added as liquid to the mixing water by means of mechanical equipment capable of accurate measurement and control.

4. Calcium Chloride. Calcium chloride may be added as an accelerator during cold weather, with maximum amount being two pounds per sack of cement. (Ord. 5-1988 § 1 (part); Development Code 4-6-3)

